

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Attorney Docket No.: **ISPH-0743**

Inventors: **Monia and Wyatt**

Serial No.: **Not Yet Assigned**

Filing Date: **Herewith**

Examiner: **Not Yet Assigned**

Group Art Unit: **Not Yet Assigned**

Title: **Antisense Modulation of Inhibitor-Kappa  
B Kinase-Gamma Expression**

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Date of Deposit **July 28, 2003**

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By *Jane Massey Licata*  
Typed Name: **Jane Massey Licata, Reg. No. 32,257**

Commissioner for Patents  
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Sir:

**INFORMATION DISCLOSURE STATEMENT**

Pursuant to 37 C.F.R. §1.56 and in accordance with 37 C.F.R. §§1.97-1.98, information relating to the above-identified application is hereby disclosed. Inclusion of information in this statement is not to be construed as an admission that this information is material as that term is defined in 37 C.F.R. §1.56(b).

- (XX) In accordance with §1.97(b), since this Information Disclosure Statement is being filed either within three months of the filing date of the above-identified application, within three months of the date of entry into the national stage of the above identified application as set forth in §1.491, or before the mailing date of a first Office Action on the merits of the above-identified application, no additional fee is required.
- ( ) In accordance with §1.97(c), this Information Disclosure Statement is being filed after the period set forth in §1.97(b) above but before the mailing date of either a Final Action under §1.113 or a Notice of Allowance under §1.311, therefore:
- ( ) Certification in Accordance with §1.97(e) is set forth below; or
- ( ) The fee of \$240.00 as set forth in §1.17(p) is attached.
- ( ) In accordance with §1.97(d), this Information Disclosure Statement is being filed after the mailing date of either a Final Action under §1.113 or a Notice of Allowance under §1.311 but before the payment of the Issue Fee, therefore included are: Certification in Accordance with §1.97(e); Petition Requesting Consideration of the Information Disclosure Statement; and the fee of \$130.00 as set forth in §1.17(I)(1).
- ( ) Copies of each of the references listed on the attached Form PTO-1449 (modified) are enclosed herewith.

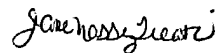
(XX) In accordance with §1.98(d), copies of some or all of the references listed on the attached Form PTO-1449 (modified) are not enclosed herewith because they were previously submitted to the U.S. Patent and Trademark Office in prior application Serial No. 09/972,607, filed October 6, 2001 for which a claim for priority under 35 U.S.C. §120 has been made in the instant application.

Please charge any deficiency or credit any overpayment to Deposit Account No. 50-1619. This form is submitted in duplicate.

( ) The relevance of the listed references in a foreign language is as stated in the specification at pages @@.

(XX) All listed references are in the English language.

Respectfully submitted,



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Date: July 28, 2003

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DOCKET NO.: ISPH-0753

Form PTO-1449 Modified		Docket No. ISPH-0753	Serial No. not yet assigned
List of Patents and Publications Cited by Application (Use several sheets if necessary)		Applicant Brett P. Monia et al.	
		Filing Date herewith	Group
U.S. Department of Commerce Patent and Trademark Office			
OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)			
	AA	Aradhya et al., Atypical forms of incontinentia pigmenti in male individuals result from mutations of a cytosine tract in exon 10 of NEMO (IKK-gamma), Am. J. Hum. Genet., 2001, 68:765-771	
	AB	Chu et al., IKKgammamediates the interaction of cellular IkappaB kinases with the tax transforming protein of human T cell leukemia virus type 1, J. Biol. Chem., 1999, 274:15297-15300	
	AC	Doffinger et al., X-linked anhidrotic ectodermal dysplasia with immunodeficiency is caused by impaired NF-kappaB signaling, Nat. Genet., 2001, 27:277-285	
	AD	Jain et al., Specific missense mutations in NEMO result in hyper-IgM syndrome with hypohidrotic ectodermal dysplasia, Nat. Immunol., 2001, 2:223-228	
	AE	Jin et al., Role of adapter function in oncoprotein-mediated activation of NF-kappaB. Human T-cell leukemia virus type I Tax interacts directly with IkappaB kinase gamma, J. Biol. Chem., 1999, 274:17402-17405	
	AF	Karin et al., The I kappa B kinase (IKK) and NF-kappa B: key elements of proinflammatory signalling, Semin. Immunol., 2000, 12:85-98	
	AG	Krappmann et al., The I kappa B kinase (IKK) complex is tripartite and contains IKK gamma but not IKAP as a regular component, J. Biol. Chem., 2000, 275:29779-29787	
	AH	Li et al., Identification of a cell protein (FIP-3) as a modulator of NF-kappaB activity and as a target of an adenovirus inhibitor of tumor necrosis factor alpha-induced apoptosis, Proc. Natl. Acad. Sci. U. S. A., 1999, 96:1042-1047	
	AI	Lin et al., Protein kinase C-theta participates in NF-kappaB activation induced by CD3-CD28 costimulation through selective activation of IkappaB kinase beta, Mol. Cell Biol., 2000, 20:2933-2940	
EXAMINER		DATE CONSIDERED	

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OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)			
	AJ	Makris et al., Female Mice Heterozygous for IKK-gamma/NEMO Deficiencies Develop a Dermatopathy Similar to the Human X-Linked Disorder Incontinentia Pigmenti, Molecular Cell, 2000, 5:969-979	
	AK	May et al., Selective inhibition of NF-kappaB activation by a peptide that blocks the interaction of NEMO with the IkappaB kinase complex, Science, 2000, 289:1550-1554	
	AL	Mercurio et al., IkappaB kinase (IKK)-associated protein 1, a common component of the heterogeneous IKK complex, Mol. Cell Biol., 1999, 19:1526-1538	
	AM	O'Mahony et al., Activation of the heterodimeric IkappaB kinase alpha (IKKalpha)-IKKbeta complex is directional: IKKalpha regulates IKKbeta under both basal and stimulated conditions, Mol. Cell Biol., 2000, 20:1170-1178	
	AN	Rothwarf et al., IKK-gamma is an essential regulatory subunit of the IkappaB kinase complex, Nature, 1998, 395:297-300	
	AO	Rudolph et al., Severe Liver Degeneration and Lack of NF-kB Activation in NEMO/IKKg-deficient Mice, Genes & Development, 2000, 14:854-862	
	AP	Salmeron et al., Direct phosphorylation of NF-kappaB1 p105 by the IkappaB kinase complex on serine 927 is essential for signal-induced p105 proteolysis, J. Biol. Chem., 2001, 276:22215-22222	
	AQ	Schmidt-Suppran et al., NEMO/IKKg-Deficient Mice Model Incontinentia Pigmenti, Molecular Cell, 2000, 5:981-992	
	AR	Smahi et al., Genomic rearrangement in NEMO impairs NF-kappaB activation and is a cause of incontinentia pigmenti. The International Incontinentia Pigmenti (IP) Consortium, Nature, 2000, 405:466-472	
	AS	Yamaoka et al., Complementation cloning of NEMO, a component of the IkappaB kinase complex essential for NF-kappaB activation, Cell, 1998, 93:1231-1240	
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OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)			
	AT	Zandi et al., Bridging the gap: composition, regulation, and physiological function of the IkappaB kinase complex, Mol. Cell Biol., 1999, 19:4547-4551	
	AU	Zonana et al., A Novel X-linked Disorder of Immune Deficiency and Hypohidrotic Ectodermal Dysplasia Is Allelic to Incontinentia Pigmenti and Due to Mutations in IKK-gamma (NEMO), American Journal of Human Genetics, 2000, 67:1555-1562	
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		Filing Date	Group			
<b>U.S. PATENT DOCUMENTS</b>						
<b>Examiner's Initial</b>		<b>Document No.</b>	<b>Date</b>	<b>Name</b>	<b>Class</b>	<b>Subclass</b>
	AA					
	AB					
	AC					
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	AG					
	AH					
	AI					
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	AK					
	AL					
	AM					
	AN					
<b>FOREIGN PATENT DOCUMENTS</b>						
<b>Examiner's Initial</b>		<b>Document No.</b>	<b>Date</b>	<b>Country</b>	<b>Translation YES      NO</b>	
	AO	WO99/47672	8-21-2001	PCT	X	
	AP					
	AQ					
	AR					
	AS					
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	AU					
	AV					
	AW					
	AX					
<b>EXAMINER</b>				<b>DATE CONSIDERED</b>		

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	Applicant <b>Monia and Wyatt</b>	
	Filing Date <b>Herewith</b>	Group <b>Not yet assigned</b>

## U. S. PATENT DOCUMENTS

Examiner		Document	Date	Name	Class	Subclass
	BA	6,114,517	9-5-00	Monia et al.	536	24.5

## FOREIGN PATENT DOCUMENTS

Examiner Initial		Document No.	Date	Country	Translation YES NO	

EXAMINER

DATE CONSIDERED